

and itching; 630 (24 percent) had severe generalized life-threatening reactions with unconsciousness, dyspnea or throat swelling; 73 (3 percent) had delayed reactions including hyperglobulinemic thrombocytopenic purpura, bloody diarrhea, nephrotic syndrome, hepatorenal syndrome, and CNS involvement (EEG changes, peripheral neuropathy, polyneuritis, transverse myelitis). Serum sickness reactions have been noted as late as ten days after a sting. Infection at site of sting is common, especially after stings by yellow jackets, wasps or hornets, which unlike the honeybee are scavengers.

The diagnosis is made primarily by history; however, skin testing, although not infallible, is confirmatory and should be performed with titration, increasing concentrations of extracts to determine the concentration to be used in hyposensitization. A refractory period of falsely negative skin tests may exist as long as three weeks after a sting. False positive skin tests are not infrequent. Hyposensitization injections are of value in reducing both local and systemic reactions. Duration of hyposensitization treatment has not been established. However, current thinking is that it should continue for at least five years with the injections being given every one to four months after a maximum dosage has been achieved.

Prompt emergency treatment is very important and persons known to be sensitive to hymenoptera should carry an emergency kit at all times. The stinger and venom sac of a honeybee should be scraped off completely with a fingernail, for it takes 2 to 3 minutes for the sac to empty. Epinephrine is by far the drug of choice, and should be injected both at the site of the sting to delay absorption, and elsewhere for systemic effects. Not quite as effective but more convenient for emergency kits are the inhalers containing epinephrine. Sublingual isoproterenol is no longer recommended, as it may worsen shock from peripheral vasodilation because of its beta-adrenergic effect. Antihistamines are also useful in the initial therapy and steroids may be of value later. A tourniquet should be included in every kit.

LEO N. MELEYCO, M.D.

REFERENCE

Barr SB: Allergy to hymenoptera stings—Review of the world literature, 1953-1970. *Ann Allergy* 29:49-66, Feb 1971

Mites in House Dust

RECENTLY THERE HAVE been many reports concerning the possibility that house dust allergy is caused by pyroglyphid mite sensitivity. Evidence of this association has been based on history, finding the mites in homes, puncture skin tests, leukocyte histamine release, passive transfer and relief of symptoms by hyposensitization with mite extracts.

In contrast, Kawai et al have reported that while leukocytes of some house dust reactors release histamine in the presence of mite extracts, others do not.

In addition, Hosen has warned that insect extracts themselves contain histamine and can produce a wheal by either puncture or intradermal test.

Mites are probably an important cause of house dust allergy but other factors may also be involved. Further studies will be necessary to clarify the situation.

JOHN S. O'TOOLE, M.D.

REFERENCES

- van Bronswijk JEMH, Sinha RN: Proglyphid mites (Acari) and house dust allergy. *J Allergy* 47:31-52, Jan 1971
- Hosen, H: Insects as a cause of inhalant respiratory allergy. *Ann Allergy* 28:171, Apr 1970 (abstr)
- Kawai T, Marsh DG, Nagy SM, et al: The significance of dermatophagoides allergens in house dust allergy in the Baltimore area—Assay by leukocyte histamine release. *J Allergy* 47:93, Feb 1971 (abstr)

Association of Air Pollution With Asthma

ASTHMA HAS TRADITIONALLY been associated with airborne pollutants from natural sources such as pollens and mold spores, and symptoms are believed to be mediated by allergic mechanisms. Nonspecific irritants may also produce asthma in